Mr. Lauh

SUMMARY TRANSLATION OF "RADIO" NO. 05 [MAY] FOR 1990

[Rough, summary translations of selected articles, mostly on amateur radio subjects, from **RADIO**, a monthly magazine published jointly by the Ministry of Communication of the USSR and the military-training organization DOSAAF.]

[As part of their support of the activities of the International Amateur Radio Union, the Region 1 IARU Secretariat and The American Radio Relay League, Inc. generously share subscription and postal costs.]

[Square brackets set off material added by the translator **and not appearing in the original** -- such as a comment, reference, or equivalent expression in another language.]

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RADIO #05/1990 RECEIVED WASHINGTON 09 JUNE 1990
SUMMARY TRANSLATION MAILED TO ARRL 20 JULY 1990

Inner front cover: Model of new equipment readied for serial production by the Ministry of Communication of the USSR. [Clockwise from upper left:] Portable, dual-cassette tape-recorder/radio "Mayak RMD-215 stereo"; portable broadcast receiver "Meridian-RP-348"; automatic emergency distress-signal transmitter "KosPAS-ARB-PK"; portable ["luggable"? - nosimaya] radio set "Arbalet-1k"; ultrashortwave portable ["luggable"?] radio set "Arbalet-2.5"; mobile radio set "Transport RV-1."

p 2: "TIME OF CHANGE: THE MINISTER OF COMMUNICATION OF THE USSR ON THE ROAD TO RADICAL RESTRUCTURING." ["Radio" editor-in-Chief A[natoliy Vladimirovich] Gorokhovskiy interviews Minister of Communication Erlen Kirikovich Pervyshkin.]

[Introduction]

Erlen Kirikovich Pervyshkin has appeared on the pages of "Radio" as the Minister of the Means-of-Communication Industry [ministr promyshlennosti sredstv svyazi]. In the summer of 1989, he was confirmed as Minister of Communication of the USSR [ministr svyazi SSSR]. The composition [sostav] and structure of the Ministry of Communication underwent radical changes, in accordance with government decisions [postanovleniya pravitel'stva] -- in many ways it's now a completely new ministry, encompassing operating and industrial enterprises, and science.

Q: What is the main task facing the communication sector?
A: Our country got to be one of the most powerful industrial powers by mobilizing resources to create the heavy, machine-building, defense, and space industries. Others, including to some degree communications, got what was left over. Also, the role of communications in the life of modern society was underestimated at high levels.

Today our country occupies only 27th place in the number of telephones relative to the population! Applications to install telephones in apartments exceed 16 million. We aren't in a position to offer services that have become commonplace in many developed countries. Antiquated equipment needs replacement, and priority must be given to digital systems and to integrated communication networks. We're behind too in the number of radio and television programs that listeners and viewers can receive. Overcoming the accumulated, years-long lag isn't feasible without concentrated efforts by scientific, industrial, construction, and operating communication organizations and enterprises, or without additional and substantial investment.

Decreasing military outlays and the current conversion of defense enterprises [to civilian production] enables us to accelerate the expansion of civilian communication facilities and the introduction of information techniques throughout society [informatizatsiya obshchestva].

Our most important goal is to satisfy the requirements of the population and economy. For this purpose a national program for developing communications in the country [natsional'naya programma razvitiya svyazi strany] is being drafted.

Q: Readers often express concern over our country falling behind developed countries in the field of communication technology. How do you think we should deal with this situation?
A: The national program for developing communications in the country that I just mentioned provides for overcoming the lag in new communication modes and technologies. A Telephone Program [Programma telefonizatsii, literally something like Program of Telephonizing, or Program of Telephonization] has been adopted for the Soviet Union, in accordance with which there are to be 100 million telephones in the country by the year 2000, meaning that practically every family will have its own telephone (we now have about 40 million telephones). But "telephonization" also means developing such new modes of business communication as electronic mail, tele- and videotex, telefax, videotelephone, and a number of others.

I again want to emphasize that without converting to digital we won't be able to offer users an array of new modes of communication. This applies directly to radio broadcasting and television.

Analysis of foreign and Soviet experience suggests that we should create a so-called [dedicated? separate?] digital switched network [vydelennaya tsifrovaya kommutiruyemaya set' (VTsKS)], which will enable us to provide a wide range of services, initially, to a relatively limited number of subscribers (of the order of 200 thousand).

We plan to build the VtsKS in two stages -- from 1990 to 1995 for a network of 50 to 100 thousand subscribers, and from 1995 to 2000 for networks of 150 to 200 thousand.

Q: Many are now writing about our lagging behind in information technologies. The concept of introducing information technology throughout the country [Kontseptsiya informatizatsii strany], worked out by the Academy of Sciences of the USSR, by the State Committee on Computer Technology and Informatics [Goskomitet po vychislitel'noy tekhnike i informatike] was examined recently and was adopted by the Committee on Transport, Communication, and Informatics of the Soviet of the Union of the Supreme Soviet of the USSR. What place do you see for your Ministry in the state program of introducing information technology?
A: The introduction of information technology into Soviet society is a state task whose time has come. It has exceptionally important significance in the restructuring [perestroyka] of the social-economic, spiritual, and political life of our country. Information technology is already being introduced in a number of countries. Much work needs to be done by specialists in the Soviet Union, which lagged in becoming active in this strategically important field.

Q: What progress can be expected in the next few years in the use of satellites in television and radio broadcasting?
A: Thanks to satellites almost all residents of the country can watch television. However, multi-program television broadcasting [mnogoprogrammnoye televizionnoye yeshchaniye - NTV (sic)] hasn't yet been introduced. One of the reasons for this is insufficient power generation aboard satellites. The creation of the "Energiya" rocket, the most powerful in the world, will permit placing satellite platforms weighing up to 18 tons in orbit, which will provide not less than 20 kW of power. ... Heavy satellites will open up new horizons for national and regional television and radio broadcasting.

Q: Returning to matters here on Earth, the second session of the Congress of People's Deputies approved a government program calling for a significant growth in the production of consumer goods, including consumer radio electronics. What is a role of the Ministry's enterprises in accomplishing this task?
A: Following the reorganization of ministries last summer [1989], many enterprises of the former Ministry of the Means-of-Communication Industry of the USSR (Minpromsvyazi), which manufactured large qualitites of consumer radioelectronics, were transferred to the Ministry of Radio Industry (Minradioprom). Nonetheless, the production plan for such goods at enterprises of the Ministry of Communication of the USSR was extremely significant. This year, we are supposed to produce consumer goods worth 4 billion rubles, including 1.7 million black-and-white television sets, 3.2 million radio receivers (including 450 thousand with tape recorders [? - magnitoly]), and 800 thousand tape-recorders [magnitofony].

I'd especially like to mention fourth-generation color televison sets for receiving PAL/SECAM systems and equipped with remote control.

I think the all-wave, small-size "Meridian-348" radio receiver ([one] longwave, [one] mediumwave, two shortwave, and [one] ultrashortwave [VHF] bands), and the dual-cassette stereo radio-tape recorder VEF-287 will be popular. Production of the laser compact-disk player LP-001, the "Estonia," has begun in Tallinn.

Production has also begun of inexpensive portable receiver-transmitters for tourists and sportsmen. Many of course are interested in radio security devices for cars, garages, apartments, and dachas [Russian country cottages], and we see it as our duty to speed up mass production of such items.

In 1991, our industry plans to start production of a number of other articles, including videomagnetic players and systems for direct reception of television transmissions from satellites. We participate actively in work on creating a very promising HDTV [televideniye vysokoy chetkosti - TVVCh]. But, as the editors have told me, this same issue of "Radio" contains material from Professor M. I. Krivosheyev, a well-known specialist in the field of television, who describes in fairly great detail the research being conducted in this field.

I understand that readers won't be pleased by this information on the production of consumer radioelectronics. Yes, the shelves of our radio stores are very poorly stocked and improvements are not noticeable. The enterprises of the Ministry of Communication, together with those of other ministries, are taking steps to increase production of consumer goods, and this is facilitated by the on-going conversion [of military to civilian production]. But everything doesn't depend exclusively on the collectives of our [the Ministry of Communication's] enterprises -- our collectives are very often let down by smezhniki[1], and I share the alarm expressed in the appeal to smezhniki by the collectives of enterprises of the Ministry of the Radio Industry, published in "Pravda" of 9 March 1990.

As a rule, dozens ["tens"] of enterprises participate in the design and production of even a simple radio device, and both the quantity and quality of the article depend entirely on their coordinated and responsible work.

p 5: "NOT IN UNITED RANKS" ["NE RAZRYADOM YEDINYM"], [letter to the editor] from V. Gichko, UB4MCI.

As is known, according to the rules, a certain sport class [razryad] is required to upgrade a station from one category [kategoriya] to another. For example, to upgrade a station from third to second category, a 2nd sport radiocommunication class is required. I think that such an approach to qualifying the licensee of a station is one-sided. In the first place, all radio amateurs don't participate in competitions. Some like chasing diplomas [certificates], some like to construct radio equipment, and some simply derive satisfaction from on-the-air operation. In the second place, in recent years it's become known how these classes are earned. I don't want to call everyone lovkachi [clever fellows] and obmanshchiki [cheats], but I know how some operators of collective stations in our oblast' received their sport classes.

I suggest determining the qualifications of station licensees not only by their sport class but also by the quality and amount of time of their on-the-air operation.

I think the present system discredits the very idea of amateur radio communication. Like it or not [we are told], participate in competitions. Sometimes people just throw up their hands. In our town, many have given up their favorite activity. They say: "This way you won't get your second category before going on pension." I think radio amateurs will agree with me that the existing system must be changed. In what respect is the Soviet radio amateur worse than his American counterpart, who is granted the category for which he passes an exam. Honestly, it's sad.

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[1]The coined noun smezhniki (the adjective smezhnyy, from which it is derived, means contiguous, adjacent) may refer to workers of another enterprise, one belonging to a different ministry but on whose output workers in the enterprise in question vitally depend.

pp 6 - 8: "TELEVISON: PREDICTION FOR TOMORROW" ["TELEVIDENIYA: PROGNOZ NA ZAVTRA"]. [Professor Mark Iosifovich Krivosheyev, Doctor of Technical Sciences, chairman of Study Group 11 (Television) of the CCIR[2], is interviewed by R. Levin.

Q: There are 700 million television sets in the world (100 million in the USSR), their life is 25 to 30 years, and worldwide production exceeds 70 million. Is a radical change in the existing television system to achieve a great increase in quality realistic?
A: You're right, the establishment of a new television broadcasting system is only possible if it is compatible with the present one and normal reception by viewers is maintained. After all, they can't just throw away their television sets.

In general, the problem is to improve the image quality by introducing new methods for processing television signals during reception. Many have high hopes for cable TV, but cable serves primarily to increase significantly the number of programs carried. Let me remind you that we can transmit over the air not more than 3 to 5 programs on account of the limited spectrum allocated for TV. On cable, 20 or 30 could be sent, but then television with new bands and increased selectivity would be needed, and such sets aren't yet manufactured by our industry: If a cable network is used to distribute programs received from foreign satellites, transcoders need to be installed at the head stations [? - na golovnykh stantsiyakh] to convert PAL, D-2-MAC, and NTSC signals into SECAM signals for reception on existing television sets.

I'd also like to point out that while cable TV has a future in heavily-populated areas, many thinly-populated areas of our country also need multi-program broadcasting. The congestion on the frequency bands used for television doesn't permit greatly increasing the number of programs. Jumping ahead, I'll say that it's not possible to use these bands to transmit wideband high-definition television, about which we'll have more to say later.

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[2]The CCIR is the International Telecommunication Union's technical study and standards-setting organization for radio matters. I've heard mention of a compromise in the 1940s between the French, English, and Spanish linguistic groups under which the French and Spanish abbreviations (which are the same) would be used by all three groups for two of the three autonomous bodies in the ITU structure and the English abbreviation would be used for the third. As a result, the International Radio Consultative Committee and the International Telegraph and Telephone Consultative Committee are abbreviated CCIR (comité consultatif international des radiocommunications) and CCITT (comité consultatif international télégraphique et téléphonique; in return, the International Frequency Registration Board, which of course has official expanded titles in all the official languages of the ITU, is abbreviated IFRB in French, English, and Spanish. The Russian abbreviation for the CCIR is MKKR -- Mezhdunarodnyy Konsultativnyy Komitet po radio.

Q: What's the solution?
A: I think we need to bring new bands into service -- above 20 GHz -- and use them for satellite television. Soviet scientists have the interesting idea of creating so-called unified [combined-purpose?] space platforms [unifitsirovannyye kosmicheskiye platformy], on which large, powerful repeaters could be installed, capable of relaying many television programs. It's very important [to note] that the regulatory basis for satellite television and radio broadcasting has not yet been worked out for these new international bands. For these bands, systems based on new principles [? - printsipal'no novyye sistemy] for satellite multiprogram broadcasting can be proposed and corresponding draft frequency plans for TV as well as for sound broadcasting can be prepared for the 1992 World Administrative Radio Conference. I am convinced that there is great potential for our country in the creation of space platforms.

Q: But how practical is it to increase the quality of the image? Shouldn't we master the production of digital television sets?
A: Digital processing of received signals facilitates the elimination of repetitions [ghosts?] [ustraneniye povtorov], lowers the noise level, increases contrast, etc. But high definition television will be the most decisive factor in increasing picture quality.

Q: We've talked quite a bit about HDTV today. Still, how would you explain the tremendous intrest in HDTV all over the world, from statesmen to everyday television viewers?
A: High definition television really does represent a revolution in the technique of transmitting and reproducing visual information. With over 1000 lines of information, a screen measuring not less than one meter diagonally, and a 16:9 format instead of the present 4:3, HDTV will achieve twice the definition of present television sets. The viewer receives some three-dimensional image effect [nekotoruyu ob"yemnost' izobrazheniya], and the four-channel sound-reproduction system strengthens the "presence effect."

Conventional electronic-ray tubes may be used in HDTV receivers, but I think the future lies with projection television sets with flat screens using the latest in laser electronics.

I would underscore the fact that HDTV not only resolves the task of high-quality broadcasting but opens up the era of electronic cinematography. It will be possible to project film onto large screens in special teletheaters, reducing the process of "delivering" motion-picture film to transmitting an HDTV signal by cable or satellite, thus automating [motion-picture] showings.

HDTV will also find applications in computer technology, printing [poligrafiya], medicine, space, and other fields.

Q: But of course high image definition must be paid for in broader bandwidth.
A: Yes, an HDTV television signal will occupy four times the bandwidth required for ordinary TV. Without a doubt this is the most difficult aspect. But today it is important to choose a common HDTV system to facilitate exchange of programs, the standardizing of broadcasting equipment, operational simplicity, and monitoring and measurement operations.

Q: Not long ago several different technical varieties of HDTV were demonstrated in Moscow. Isn't there a threat that the same thing will happen as with color television, with three basic systems -- SECAM, PAL, and NTSC, and numerous variations on them -- operating simultaneously?
A: That's just the point, such a threat really does exist. Therefore the choice of an HDTV standard is a very important task, toward which no small effort is presently being devoted, including in the CCIR. But first a word about the present situation.

Japan developed the first HDTV broadcasting system. Since June 1989, daily, hour-long broadcasts have been taking place, and almost all large Japanese firms have mastered the production of HDTV receivers. The Japanese system is based on 1125 lines and a field frequency of 60 Hz.

In Western Europe a variety of HDTV has been created with 1250 lines and a field frequency of 50 Hz.

Our country has proposed a third technical solution, with 1350 lines and, for compatibility, a field rate also of 50 Hz.

Q: It's clear that a lot of money and effort has gone into creating each variety of HDTV. What's the solution to the existing situation?
A: Back in 1986, the CCIR Plenary Assembly charged Study Group 11 to work out a mutually acceptable solution and to consolidate the efforts of all countries of the world in introducing HDTV. Our country contributed greatly to the search for a solution by proposing a common approach. This approach includes the creation of teleprograms, their distribution via telestations, and their transmission via radio-relay, cable, optical-fiber, as well as satellite communication channels. The proposed model takes into account video recording and developing a network of teletheaters.

Study Group 11 concluded that HDTV standardization should begin not with the number of lines and the field frequency but with something else entirely. The main problems are working out the basic parameters of high definition, defining the means of transmitting the signal to the user, and the coupling [sopryazheniye] of any HDTV studio standard with existing communication channels and color TV systems.

Q: The last is especially important. At the beginning, we said that any modernization may not affect the present TV network, and television viewers must experience an improvement in image quality with regular television sets[3]. How will the coupling you speak of be accomplished?
A: Various "broadcasting interfaces" will be needed. With their help, these tasks will be resolved depending upon the concrete goal. Thus, one class of interface is required for the coupling of HDTV with standard TV systems, i.e. to transform an HDTV signal into an enhanced-quality standard television signal used in a specific area for broadcasting. Another will be needed in countries adopting an intermediate variety between HDTV and regular television, for example, the enhanced-quality system known abroad as MAC. A third class of interface converts the wideband HDTV signal into a narrow-band one for transmission on existing communication channels. This means that a signal carrying HDTV information can be transmitted in a 6 to 8 MHz band. Finally, a broadband, high-class signal will be sent with the help of a fourth class of interface. It's important that the parameters of the HDTV signal be such as to permit coupling it with satellite TV broadcasting systems and also with fiber-optic communication channels such as the Transsoviet Line [Transsovetskaya liniya] which is included in the global ring of the Universal Communication Network [Vsemirnaya set' svyazi].

Q: With a broadcasting interface, we can start introducing HDTV everywhere. Wouldn't it be worthwhile to transfer all telecenters to the new system?
A: I don't think so. It would make sense if the telecenter is used not only for broadcasting but also for producing motion pictures, recording [konservatsiya] of programs, and so forth.

Q: The next CCIR Plenary Assembly will be held in the West German city of Duesseldorf. It will have great significance in confirming [v plane utverzhdeniya] of an international HDTV standard. What luggage is Study Group 11 taking to this forum?
A: We succeeded in adopting five draft Recommendations on HDTV, including ones on standardizing a significant portion of the basic parameters (format, sweep direction [napravleniye razvertki], colorimentric data [kolorometricheskiye dannyye], and others). Study Group 11 participants reached agreement on principles for exchanging programs, producing motion picture films, and evaluation of HDTV quality. Already these Recommendations are applied when shooting film. Quite a few have been made. Last year, in the Swiss city of Montreux, a festival even took place, at which over 50 tapes were shown.

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[3]I don't believe the second condition, the one about providing substantial improvement of image quality on conventional TV sets, was mentioned previously.

Q: OK, but how will the number of lines and the field frequency be dealt with?
A: All that has been adopted is a decision on the basic parameters of HDTV systems and systems intended for motion-picture production, graphic arts [poligrafiya], and computer techniques.

Q: Do you believe that a single HDTV standard will nonetheless be adopted?
A: It's hard to guarantee this one hundred percent. However, I have no doubt that the first step has been taken.

Q: Now let's come down from the high international level to the level of the simple viewer.
A: I think that in the next few years HDTV will come, first of all, to motion-picture studios and to teletheaters, where the most important international events will be shown. Such showings could take place both in Moscow and in other cities in our country, for example in 1992 during the winter and summer Olympics, if our specialists were to propose such an initiative and were able to convince their foreign colleagues to cooperate in it.

Q: Is it possible to look beyond the HDTV horizon?
A: It seems to me that stereophonic TV is beyond the horizon. The possibility of using HDTV to create three-dimensional television is already being studied in the CCIR.

Q: Most of our readers are radio amateurs. Can't they speed up, even a little bit, the arrival of HDTV in their apartments?
A: I think that they are just the ones to be in a position to take a step toward HDTV. To begin with, they could construct, for example, a wide screen with a 16:9 format out of several film viewers [kinoskopy] of different sizes. One could watch wide-screen motion-picture films on such an improvized screen. With normal transmission, a large part of the 16:9-format screen is occupied by the 4:3-format screen, and the remaining space is used for viewing programs, for example, in three other channels.

And from that sort of uncomplicated model, it isn't very far to designing a wide-format picture tube that will be used in HDTV.

pp 13 - 14: "CQ-U."
VHF*UHF*SHF, edited by S. Bubennikov

RADIOAURORA.

This concerns aurora propagation in the Summer and Autumn of 1989.

The "shaking" of the Earth's magnito- and ionosphere by storms on the agitated [surface of the] Sun continued. The events of 13 - 14 March 1989 -- the strongest "aurora" in the past eight years, described in "CQ-U" in RADIO #09/1989 -- were repeated 20 - 21 October and 17 November 1989. Noticeable openings also occurred on 10 June, 19 and 26 September, and 2 - 3 November 1989. The radioaurora extended as far southward as during the Spring.

It's noteworthy that no stations in Europe[4] located further south than our ultrashortwavers were affected, even though the station density is far greater there. The southernmost stations were I4XCC from [grid] square JN63 and F9HS from JN23.

Aurora was observed for the first time in Krivoy Rog (UB4EWA), Smela (RB5CCO), Dneprodzerzhinsk (RB5EF), and Tselinograd (UL7BAT). Many in the middle latitudes (all the way to the northern Ukraine) saw aurora borealis [tsvetnoye severnoye siyaniye].

On almost all these dates, "aurora" QSOs occurred on 430 MHz.

The following stations submitted information: UC2OEU, UA9SL, UA9FAD, UZ3DD, RB5LGX, RB5PA, UA1OJ, UA3XFA, RB5AG, RB5AO, UA4UBQ, UA9CS (description of the operations of several stations, including UZ9CC, UA4WPF, UL7BAT, UA9YLU, and RA4PZ), RA3LE, UA4API, RB5QCG, UC2AAB, RA6AAB, UA9XQ, UQ2GFZ, RB5EF, UZ3TXB, UV1AS, UA4UK, UA1ZCG, RA3AGS, RW3AZ, RA3YCR, UA3MBJ, UV4HN, UA1UM, UW9WP, RA6AAB/U1N, UA1ZCL, RA4NEQ, UA4NM, UA9LAQ, UA3RBO, RB5AL, and UC2OF.

[There follow 1-1/2 columns of detailed excerpts from station reports. To save space, I have concentrated on reports of contacts with foreign stations, but would be glad to send anyone interested a copy of the original showing all stations reported worked.]

UV4HN worked OH2BAP, UA4UK worked Y22ME and DKØTU (about 2000 km), RB5EF worked DL7BF (ODX 1931 km), RA3AGS worked Y21NB, LA3BO, DL3LBK (2000 km), DJ9YE, DL8LAQ, SP6GZZ, OK2KZR, OZ5BU, SM6MB, and OZ1GEH. UZ3DD worked PAØOOS (1995 km), HGØHO, PAØOOM (1950 km), and DL1SDN (2040 km). In October and November, UV1AS had over 20 QSLs on 430 MHz, including with RW3RW, UA4NM (1100 kkm), UA3IDQ, and RA3YCR; he heard RB5AL; on 144 MHz he worked SP1JWY (JO84), LA3EU (JP32), OY9JD (IP61, 1993 km). On 17 November, on account of heavy QRM on 144 MHz, RA3YCR basically operated on 430 MHz, where he had 15 QSOs with Denmark, the GDR, and the FRG. RA3LE reported working DX stations on 430 MHz: Several OHs and DL2NO, DJ9BV, LA8SJ, and PA3DZL (1855 km) on 26 September, and OZ1LO, SKØCT, SM4KYN, SM3AKW, and LA9BM on 20 October. RB5PA's most interesting QSOs were with F1FHI, F6FDP, OE3XCI, and OE3UP.

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[4]When Russians, even in the European portion of the USSR, refer colloquially to "Europe," they often seem -- as here -- to have somewhere else in mind.

I'd like to go into individual events in a little more detail and even provide some scientific interpretation.

UZ3DD from Klin writes that during the radioaurora of 21 - 22 October he used an efficient EME antenna (4 7-meter blades [4 polotna po 7 m]), rotatable in two planes. Whereas before everything got into his receiver, now, by turning the antenna, he could select. Interference signals from a meridional [southern] direction were well surpressed. The ability to raise the elevation angle played a big role. Even DK1KO (1700 km) came in with an elevation angle of 10° (azimuth 310°). Probably raising the elevation angle lessened Earth noise and all possible kinds of local interference.

And here's what UA9LAQ from Tyumen' reports. On 17 November, 30 regular QSO's didn't satisfy him, since his antenna was "looking" north. Probably out of desperation he tried a vertical [??? - shtyr = rod] antenna intended for local communication. And an unlikely thing happened. UA9YJA (1250 km) answered him from the east, then UA9YLU and RA9FMT from the west, then again UA9MAX from the east.

What was going on here?

> [Translator's note: The final five paragraphs of this section on radioaurora were extremely difficult to translate, and there is an especially great possibility of error.]

During radioaurora, the signal level is proportional to the useful volume [ob"yem], for the stations working one another, of ionization "seized" ["vykhvachennomu"] by the antenna lobes. Use of efficient (narrow-beam) antennas provides certain advantages -- an increase in energy delivered by the station and a reduction in interference, but also involves a "loss of antenna-gain" effect related to that experienced during professional tropospheric communication (the signal level drops with a decrease in the useful amount of ionization). UA9LAQ avoided this. In addition, the Tyumen' amateur, on account of the distance separating him from the centers of ultrashortwave activity, still doesn't have the problem of interference.

Precisely on account of the small amount of ionization caused by the narrowness of the lobes, contacts on 430 MHz are difficult. And not only for that reason. RA3LE from Smolensk writes "I hear DL2NO calling CQ on 430 MHz and call him. He doesn't answer. The same with OH3BK. What's this? I call CQ myself. First OH3BK calls, then both stations mentioned above. But the main thing is that all three were heard not 3 kHz lower in frequency (taking into account the Doppler effect) as is usually the case based on many years of operation, but 2 kHz higher!" ...

Here one may say the following. When very strong radioaurora reach far southward, when ionization occupies a large area, and when some middle-latitude QTH -- not some small segment in the north, is within radio visibility, observation (discrimination with the antenna lobes) [(vydleniye lepestkom antenny)] of small blocks of ionization is possible, clearly distinguishable from the background noise [? - ot fonovoy] by the direction of movement as well as by the degree of ionization. The small extent [Malyye razmery] of these sharply-contrasting "islands of ionization" are caused by a lessening of distortion (with an increase in signal level above normal), so that station signals begin to come in with a clean tone, as during communication via sporadic E level. UA9FAD, UZ3DD, UV1AS, RA3LE, UA1UM, UA9CS, and UA9SL informed us of cases of such reception during radioaurora. UA4API even informs us that he was able to hear both signals (for example, from UZ3DD and UA3IDQ) -- a "hissing" stronger one and a clean one lower in frequency.

UV1AS from Leningrad recommends operating SSB when working via "aurora," if only because above 144300 kHz, that is in the telephone portion of the band, there are usually more foreign stations, including ones from rare squares. Moreover, when the radioaurora is disturbed, the unrecognizable, "metallic" timber of the voice and the low detectability [razborchivost'] of the SSB signal seems stronger and therefore preferable to the telegraphic signal (!). Communication with one and the same station in both modes confirmed this. UV1AS had such QSO's with SK6AW, SM3LIC, SM7NNJ, and several others.

And here some observed features may be explained. As is known, the human ear is able to discern a tone signal in a mixture of noise when the signal is lower by even 10 or 20 dB, and speech when the signal and noise are nearly equal to one another. In "aurora," the CW signal tone is fully turned into noise, blending in with on-the-air noise [slivayas' s efirnym], so for reception of telegraph information, the signal most be stronger than the noise, while with SSB the conditions change little[5].

INFO*INFO*INFO
edited by A[leksandr Ivanovich] Gusev, UA3AVG

FOREIGN NEWS [third of five items]:

"On the frequencies 3507 and 7003 kHz, one may not rarely meet Tanzanian station 5H3TW. Exchange of QSL cards for contact with it is via K3ZO."

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[5]I take this to mean that with whereas the conditions on CW between aurora and non-aurora communications are substantial, this is not the case with SSB.

QSL-BUREAU ADDRESSES.

LIPETSKAYA OBLAST' (137, UA3G)

398001, g. Lipetsk, ul. Gor'kogo, 10, OTSh DOSAAF [DOSAAF Combined Technical School, 10 Gor'kiy St., 398001 LIPETSK] (Oblast' QSL bureau);

399740, g. Yelets Lipetskoy obl., pl. Lenina, 1, RTSh DOSAAF [DOSAAF Radio Technical School, 1 Lenin Sq., 399740 YELETS (Lipetskaya Oblast')] (services town of Yelets).

KURSKAYA OBLAST' (135, UA3W)

305007, g. Kursk, Sumskaya ul., 5, RTSh DOSAAF [DOSAAF Radio Technical School, 5 Sumskaya St., 305007 KURSK] (Oblast' QSL Bureau).

KALUZHSKAYA OBLAST' (127, UA3X)

248640, g. Kaluga, ul. Barrikad, 174, OTSh DOSAAF [DOSAAF Combined Technical School, 174 Barricades St., 248640 KALUGA] (Oblast' QSL Bureau);

248600, g. Kaluga, ab. yashch. 32, STK "Svyazist" ["Svyazist" ("Communicator") Sport-Technical Club, P. O. Box 32, 248600 KALUGA] (services sport-technical club members);

249700, g. Kozel'sk Kaluzhskoy obl., ab. yashch. 83 [P. O. Box 83, 249700 KOZEL'SK (Kaluzhskaya Oblast')] (services town of Kozel'sk);

249400, g. Lyudinovo Kaluzhskoy obl., ul. Mayakovskogo, 19 [19 Mayakovskiy St., 249400 LYUDINOVO (Kaluzhskaya Oblast')] (services town of Lyudinovo);

249020, g. Obninsk-7 Kaluzhskoy obl., ab. yashch. 738 [P. O. Box 738, 249020 OBNINSK-7 (Kaluzhskaya Oblast')] (services town of Obninsk and surrounding rayons).

ARKHANGEL'SKAYA OBLAST' (113, UA1O)

(see also RADIO #02/1990)

165400, g. Kotlas Arkhangel'skoy obl., ab. yashch. 10 [P. O. Box 10, 165400 KOTLAS (Arkhangel'skoy Oblast')] (services town of Kotlas).

KOSTROMSKAYA OBLAST' (132, UA3N)

(see also RADIO #03/1990)

157040, g. Buy Kostomskaya Oblast', ab. yashch. 4 [P. O. Box 4, 157040 BUY (Kostromskaya Oblast')] (town QSL Bureau).

VORONEZHSKAYA OBLAST' (121, UA3Q)

394031, g. Voronezh, ul. Gramshi, 73-A, RTSh DOSAAF [DOSAAF Radio Technical School, 73-A Gramshi St., 394031 VORONEZH] (Oblast' QSL Bureau);

394000, g. Voronezh, ab. yashch. 63, KYuT-radistov "Zarya" ["Zarya" ("Dawn") Radiomen's Young Technicians' Club, 394000 VORONEZH] (services club members);

397140, g. Borisoglebsk Voronezhskoy obl., mikrorayon, d. 30, radioklub [Radio Club, 30 Microrayon, 397140 BORISOGLEBSK (Voronezhskaya Oblast')] (services town of Borisoglebsk).

DX QSLs VIA...
[UB4MHO, UA1-120-503, and UL7-026-769 contributed to this table.]

DX QSL VIA...

Публикуемая под заголовком «DX QSL via» информация — неофициальная. Она черпается из различных источников: радиолюбительских бюллетеней и журналов, эфира, карточек-квитанций и т. д.

На практике вполне естественны случаи, когда станция имеет несколько менеджеров, один из которых, например, располагает сведениями о ее работе телеграфом, другой — телефоном, третий — телетайпом или один рассылает карточки только корреспондентам из Европы, второй — только из Азии. Подобных вариантов множество.

Среди причин появления в публикациях у одной станции нескольких менеджеров следует назвать и такую: неодинаковую информацию в разных источниках, относящихся к одному периоду.

В числе использованных в данном случае при подготовке материалов — сообщения, полученные от UB4MHO, UA1-120-503, UL7-026-769.

3C0GD - SM0AGD
3C1AG - SM0AGD
3C1EA - EA4CJA
3D2GC - W6GC
3D2MI - W6MI
3D2ML - OH4ML
3D2XR - SM7PKK
3W5JA - JA7JPZ
3Y5X - LA6VM
4NOR - YU1AGL
5C2CW - F2CW
5J0DX - HK4HHG
5K1R - HK1LDG
5N0ALE - DJ2VZ
5N0MRD - DL3KCE
5W1HM - JH4IFF
5W1ML - OH4ML
5W1RY - OH3GZ
5W1VB - OH3GZ
5Z4BI - W4FRU
6D2KB - XE2KB
6Y5X - KN5X
6Y5X - KQ1F
7J1AAS /3 - KQ1F
7P8DP - W8JBI
8Q7BX - I4ALU
9G1VM - LZ1KVZ
9H3LF - G4VXE
9J2EG - DL3FAK
9M2QQ - DF2UG
9M6OO - N2OO
9M8AX - JA5DQH
9M8XX - JA5DQH
9Q5TE - SM0BFJ
9Q5XX - KC4NC
9V0YC - HS0E
9Y4SC - WA4JTK
A22EC - DF3EC
A35ML - OH4ML
A35VB - OH3GZ

A61AC - N4DW (CW)
AH2BE /AH9 - KA6V
AH2BE /KH9 - KA6V
AZ5D - LU8DZE
C53FW - C53AA
C6A /AA5AU - AA5AU
CI0MDI - VE7DP
CI3AT - VE3AT
CN0A - F6EEM
CN0A - F6EEM
CN0S - F6FYP
CQ8M - CT1BOH
CR6AHU - CT1AHU
CR9M - CT1CWT
CS0CDL - CT1CDL
CT3M - CT3EE
CT3MAW - CT3EE
CT50OD - CT1REP
CW0L - CX4CB
EC9JB - EA5BY
ED2SIL - EA2LZ
ED8URL - EA8ZX
EL2CX - K3RV
EL2CX - N2AU
FM4FE - FD1NCZ
FY0P - FY5AN
GJ0MCW - F2CW
H20A - 5B5SA
H5AEV - KA3DBN
HC8K - KT1N
HC8U - W6UE
HG0X - HA0NNN
HG4P - HA4ZZ
HG5C - HA5KKC
HI9UD - HI3AMF
HJ0DX - HK4HHZ
HJ1SJL - HK3JJH

HS0B - KA5VLS
HS0B - NY2E
HU0WDX - I0WDX
HX1DX - F6GMB
IG8R - I0RIZ
IM8A - IK8D0I
IP4T - I4YSZ
IQ4A - I4ZSQ
IU3A - I3MAU
IU6A - I6FLD
IY0A - I0JBL
IY2A - I2MQP
IY6A - I6FLD
J3 /K8CV - K8CV
J73DX - W8KKF
J79T - W5EW
JA2EZD /FS - JA2MNB
JA70WD /JD - JH1AJT
JD1YAA - JA10GE
JT0DX - HA6KNB
JY4YJ - WB3CQN
JY9M0 - WB20QY
JY9SR - W3FYT
KF7TQ /KH7 - KA0MKF
KG4DD - WD8QCU
KH8 /0H1RY - OH3GZ
KK8CW /VS9 - KB2XS
KN0E /KH3 - K9UIY
LJ2I - LA9IC
LT5F - LU5FCI
LU6ELF /D2 - N4THW
LX1RQ - SP5SJD
LX7A - DF3CB

N2HNQ /KH8 - JH4IFF
N2NT /VP9 - K3UA
N200 /SV5 - N200
N200 /VS6 - KB2XS
N8BJQ /KH9 - KA6V
NH6RT /KH8 - JH4IFF
NY6M /NH4 - KD7P
OH2AQ /OHO - OH0NRV
OQ7LR - ON7LR
P29VMK - DL8SSB
PJ2U - NK4U
PJ8T - K4PI
PJ9W - OH6XY
PY1GCW - PY1SL
SO3MAQ - DJ0MAQ
TH2X - F2VX
TI1J - K1AR
TI100D - TI4SU
TI2DU - KC7YN
TK0KC/P- F6FN
TR8AHO - DJ2VZ
TR8CA - F6CBC
TT8CW - F2CW
TY0AS - IT9AZS
TZ6PD - KB6ORD
V31B - V31BB
V47K - WB2P
V47KH - K3IPK
V47KO - K3NZ
V63DX - JA7HMZ
V73AT - K2CL
V8500 - N200
V85RM - YB8RM

V85WS - SP9AHB
VD9DM - N5DM
VK8AQK - G4WWP
VK9LA - DI5CQ
VK9LV - K1JB
VP5Q - K2LE
VQ9HB - AA6BB
VQ9LW - WA2ALY
VU7NRO - VU2AJR
WB2KXA /VS6 - KB2XS
XB1CE - XE1CI
XF4T - XE2TCQ
XV2A - JA3UB
XW8CW - F6HIZ (EBP)
XW8DX - F6HIZ (EBP)
XX9JN - KU9C
Y40DDR - Y54T0
YJ8M - SP5DY0
YK9AE - K1JB
YN3CC - W3HNK
YY3A - YV3AJ
YZ3A - YU3AA
YZ6A - YU6ARC
ZD7VC - WT8S
ZD8VJ - G4ZVJ
ZF2OF - W0GLF
ZK1XK - DL4FP
ZK2HP - JR1FYS
ZK2RY - OH3GZ
ZM2K - ZL2BNJ
ZW0F - PY7ZZ
ZW1J - PY1AJK
ZW5B - PY5EG
ZZ1AA - PP1CZ

АДРЕСА QSL-БЮРО

ЛИПЕЦКАЯ ОБЛАСТЬ
(условный номер 137, UA3G)

398001, г. Липецк, ул. Горького, 10, ОТШ ДОСААФ (областное QSL-бюро).

399740, г. Елец Липецкой обл., пл. Ленина, 1, РТШ ДОСААФ (обслуживает город).

КУРСКАЯ ОБЛАСТЬ
(условный номер 135, UA3W)

305007, г. Курск, Сумская ул., 5, РТШ ДОСААФ (областное QSL-бюро).

КАЛУЖСКАЯ ОБЛАСТЬ
(условный номер 127, UA3X)

248640, г. Калуга, ул. Баррикад, 174, ОТШ ДОСААФ (областное QSL-бюро).

248600, г. Калуга, аб. ящ. 32, СТК «Связист» (обслуживает членов СТК).

249700, г. Козельск Калужской обл., аб. ящ. 83 (город).

249400, г. Людиново Калужской обл., ул. Маяковского, 19 (город).

249020, г. Обнинск-7 Калужской обл., аб. ящ. 738 (город и окрестные р-ны).

АРХАНГЕЛЬСКАЯ ОБЛАСТЬ
(условный номер 113, префикс UA1O; см. также «Р», 1990, № 2).

165400, г. Котлас Архангельской обл., аб. ящ. 10 (обслуживает город).

КОСТРОМСКАЯ ОБЛАСТЬ
(условный номер 132, UA3N; см. также «Р», 1990, № 3)

157040, г. Буй Костромской обл., аб. ящ. 4 (городское QSL-бюро)

ВОРОНЕЖСКАЯ ОБЛАСТЬ
(условный номер 121, UA3Q)

394031, г. Воронеж, ул. Грамши, 73-А, РТШ ДОСААФ (областное QSL-бюро).

394000, г. Воронеж, аб. ящ. 63, КЮТ-радистов «Заря» (обслуживает членов клуба).

397140, г. Борисоглебск Воронежской обл., микрорайон, д. 30, радиоклуб (город).

Раздел ведет
А. ГУСЕВ (UA3AVG)

p 15: "FOUNDING CONFERENCE OF THE RAS" ["UCHREDITEL'NAYA KONFERENTSIYA RAS"], by G[ennadiy Grigor'yevich Shul'gin, UZ3AU [ex-UA3ACM], Sverdlovsk - Moscow.

"RAS (radiolyubitel'skaya avariynaya sluzhba) [Radioamateur Disaster Service] is looking for volunteers... " -- such a call to Soviet radio amateurs rang out last year from the pages of RADIO #11/1989. Reactions to the article varied. Some were frightened off by the fairly strict requirements for membership in the RAS and others simply didn't believe in the effectivness of the service, which came into being "under the wing of DOSAAF."

However, enthusiasts were also formed, basically among participants in liquidating the consequences of the earthquake in Armenia [which occurred 7 December 1988] who understood that the need to create such an organization in our country had existed for a long time. They met in Sverdlovsk in mid-January 1990 at the first founding conference[6] of the RAS. Sixty delegates from all ten radio amateur call areas of the USSR met. The principal matter taken up was consideration of the Rules [Ustav] of the RAS, presented by an initiative group.

The basic activity of the service is to provide radiocommunication and state and social organizations during work on liquidating the consequences of natural diasters, industrial accidents and catastrophes, on the terrritory of the USSR and beyond its limits. The RAS is also called upon to help organize transmission and reception of information for individual citizens through amateur channels in accordance with the Radio Regulations.

The RAS plans to provide its activists, without charge, communication equipment, the only condition being participation in its radio net.

But where will this equipment come from? Depending on articles produced by DOSAAF enterprises would be pointless. In the opinion of the majority of conference participants, the transceivers produced by them even under normal circumstances often radiate "hooligan" signals, not to mention their performance in the field! However, speeches at the conference by representatives of the radio industry support the hope that under conditions of conversion [of military to civilian production], enterprises producing communications equipment will relate sufficiently seriously to RAS and the matter of producing a decent transceiver for the Soviet shortwaver will move off dead center.

At the conference, the following frequencies were proposed for RAS operation: 1860 kHz, 3630 kHz, 7090 kHz, 14290 kHz, 21390 kHz, and 28690 kHz.

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[6]According the NLD-1410, 25 October 1989 (see summary translation RADIO #10/1989 p 13), a founding conference of the RAS was scheduled for 20 - 25 December 1989, near Moscow. Information on the RAS was stated to be available from A(eksandr) Panormov, UV3DHH (see next footnote) at P. O. Box 19, 143400 KRASNOGORSK-3 (Moskovskaya Oblast').

During the period of rescue work, operation of the disaster net may be found on these frequencies. In addition, installation of repeaters (if, of course, we receive the necessary permission!) is planned directly in the "hot" spots of a catastrophe, receiving on 145 MHz and transmitting 600 kHz higher. We don't claim any monopoly on use of these frequencies, [but] naturally ask our shortwaver colleagaues to "broadcast" a little less often on them.

In accordance with the Rules of the Service, any licensed radio amateur may be a member of the RAS of the USSR who has no other purpose in joining the RAS than helping those in need with his skill and equipment.

If you want to join the RAS, simply notify your regional coordinator. This may be done on the weekly RAS "round rables" Tuesdays at 1800 MSK [1500/1400 GMT] on 7090 or Saturdays at 1100 MSK on 14290 kHz.

The matter of using the RAS to popularize amateur radio was raised at the conference. For example, it was proposed that RAS competitions be held simultaneously with the On-Site/Off-Site Telegraph Shortwave Radiocommunication Championship of the USSR with a transferable cup and prizes provided, say, by "Radio" magazine. RAS sportsmen will operate under field conditions, with antenna installation by one person. At area and all-Union exhibitions, rescue equipment must be demonstrated and prizes awarded for the best equipment.

It's a shame there were no representatives from the FRS or the Central Committee of DOSAAF USSR at the conference, although invitations were sent to them. Improving contacts with these organs could only help matters!

The conference elected as Federal Coordinator of the RAS A[leksandr] Panormov, UV3DHH[7], an employee of the CRC of the USSR Named After E. T. Krenkel'. His deputy is M. Vodyanaya[7], UZ9CM, from Sverdlovsk. Regional coordinators were also elected, subject to confirmation at regional RAS meetings. We shall report regularly, in the press and during the "round tables," about coordination between the RAS and the rescue services.

In the opinion of some, these "tables" are still confusing, longwinded, sometimes even incoherent. What to do. "We're not magicians, we're still only learning." The main thing is that this work continue.

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[7]According to an article by the same author in RADIO #03/1989, Sasha [Aleksandr] Panormov, UV3DHH, the operator at Central Radio Club station UK3F when the earthquake occurred [7 December 1988], went to Armenia to help in rescue operations. The form of the last name Vodyanaya suggests that UZ9CM is a woman. Neither UV3DHH nor UZ9CM appears in the current U.S. (international) callbook or update.

pp 16 - 17: "GOODWILL" - "DOBRAYA VOLYA" [in both languages in original], by B[oris Grigor'yevich] Stepanov, UW3AX.

Byelorussian radio amateur Viktor Lednev, RC2AF, took the first step in what turned out to be a long process of organizing the Soviet-American Off-Site "Goodwill" Shortwavers' Competitions [Sovetsko-amerikanskiye zaochnyye sorevnovaniya korotkovolnovikov "Dobraya volya"] which took place last year[8]. He wrote to the then head of DOSAAF, Admiral G. Yegorov[9] and Larry Price, W4RA, president of the American national radio amateur organization ARRL, proposing the competitions.

The idea was approved on both sides but, on ours at least, it got stuck being put into practice.

In April 1987, during the IARU Region 1 Conference at Noordwijkerhout, the first meeting in the history of our countries took place between the leaders of the FRS USSR and the ARRL. The Americans proposed "Goodwill" competitions for the second "weekend" ["uikend"] of April 1988; their version was in many respects similar to RC2AF's suggestion.

An interesting feature of the ARRL proposal was a trip to the other country by the winners. This would have been costly and would have involved expenditure of convertible currency.

But an American citizen, who preferred to remain anonymous, set up a special ARRL fund to develop friendly relations between Soviet and American shortwavers. Our American colleagues proposed using this money to pay for the winners' trips.

And when this proposal was discussed after the delegation's return, the Central Committee of DOSAAF adopted a recommendation not to accept the money. As a result, the "poor but proud" Federation of Radio Sport proposed to the ARRL a so-called foreign-exchange-free exchange [bezvalyutnyy obmen] [one in which neither side would incur expenditures in foreign currency; this is presumably equivalent to providing that the receiving side pays]. The resulting correspondence meant that the competitions didn't take place in 1988. Moreover, bureaucratic in-fighting [? - apparatnyye igry] within the FRS [would have] resulted in delaying the competitions beyond 1989, and the second weekend of April 1990 was taken up by the Yu[riy] Gagarin Cup competitions.

The editors of "Radio" learned of the situation in January of 1989 and assumed responsibility for conducting the Soviet-American "Goodwill" Shortwave Competitions. Literally in just a couple of days, organizational matters were worked out by telex with QST and the competitions took place [on 9 April 1989]. But, alas, the winners will receive their prizes at home.

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[8]See NLD-1372, 5 March 1989, NLD-1381, 5 April 1989, and NLD-1419, 27 December 1989, for announcements and results of the contest.

[9]On 20 October 1988, Yegorov was replaced as Chairman of the Central Committee of DOSAAF by Colonel General (i.e. 3-star general) Nikolay Nikiforovich Kotlovtsev, the present head of DOSAAF.

This fairly detailed account reflects a desire to dispel various rumors still current among amateurs. It is to be hoped that this example will prompt the FRS to adopt a more democratic work style and to engage in less bureaucratic in-fighting.

One more thing. The FRS USSR should pay more attention to the suggestions of local federations of radio sport and individual amateurs. I realize it's a lot easier to "generate" ideas than to implement them, but if the central staff [apparat] -- the CC DOSAAF USSR plus the FRS plus the CRC USSR -- can't do so (and this is natural), isn't it perhaps time to transfer responsibility for specific all-Union-level matters to local FRSs or even to specially-formed groups of enthusiasts?

Well, now some American reactions to the "Goodwill" competitions. Why only American? Because Soviet amateurs limited themselves to standard experessions like "Thanks for the excellent competitions!"

[Most of the remainder of the article consists of excerpts from communications from WØCP, K9RHY, W6HJK, KA1CRP, W4NL, N6CFQ, KB8AC-WA9VMW, and W7EYE.]

p 19: "THIS IS INTERESTING." [Morse code combinations for diacritically-marked letters of the Latin alphabet.]

pp 20 - 21: "'EVERYDAY RADIOCOMMUNICATION'" ["'RADIOSVYAZ' NA KAZHDYY DEN'"]. Veniamin Yul'yevich Khoroshchankiy, Deputy Chief of the Main Administration of Space and Radiocommunication of the Ministry of Communication of the USSR, is interviewed by S[vetlana Grigor'yevna] Smirnova [head of the Propaganda (Publicity), Science, and Radiosport Department of RADIO magazine], as a followup to an article in RADIO #11/1989, announcing the decision of 30 December 1988 by the State Commission on Radiofrequencies of the USSR [Gosudarstvennaya kommissiya po radiochastotam SSSR] allotting frequencies for portable receiving-transmitting stations.

pp 22 - 23: "ON THE BORDER BETWEEN EUROPE AND ASIA" ["HA GRANITSE YEVROPY S ASIYEY"], by O. Borodin, RV3GM, Chairman, [QRP] Club.

[End of RADIO portion]

[This annex contains rough, summary translations of selected items from the newspaper **SOVETSKIY PATRIOT** (SP), published by the military training organization DOSAAF. Most of the news concerning amateur radio appears in the numbered column "**NLD**" ("**N**a **l**yubitel'skikh **d**iapazonakh" - "On the Amateur Bands"), edited by Boris Grigor'yevich Stepanov, UW3AX. Effective in January 1990, "SP" has appeared once rather than twice weekly.]

NLD-1438, 14 - 20 May 1990, p 15 (of 16):

CLUB NEWS

Radio amateurs in the Mariyskaya Autonomous Soviet Socialist Republic ["Oblast'" No. 044, non-RSFSR identifier H-E, within the Turkmenskaya SSR] will sponsor activity days 25 - 27 May 1990. Reports go to 425008, Mariyskaya ASSR, Volzhsk-8, ab. yashch. 5 (radioklub) [Radio Club, P. O. Box 5, 425008 VOLZHSK-8 (Mariyskaya ASSR)]. From A. Badanov.

Radio amateurs in the Chuvashskaya ASSR ["Oblast'" No. 097, RSFSR identifier 4Y] will sponsor activity days 28 - 29 May 1990. Winners will receive diplomas [certificates] and memorial prizes. Send reports to 428024, Cheboksary, Egerskiy bul'var, 6, RTSh [Radio Technical School, 6 Egerskiy Boulevard, 428024 CHEBOKSARY]. From UA4YW.

DIPLOMAS [CERTIFICATES]

Apply for the "In Memory of Hero of the Soviet Union Yelena Konstantinovna Stempkovskaya"[10] diploma to 309250, Belgorodskaya oblast', Shchebekinskiy rayon, ab. yashch. 6, diplomnoy komissii [Diploma Commission, P. O. Box 6, 309250 SHCHEBEKINSKIY RAYON (Belgorodskaya Oblast')].

NLD-1439, 21 - 27 May 1990, p 15:

COMPETITIONS [CONTESTS]

[List of June 1990 contests; Soviet contests included below.]

3 June - On-Site/Off-Site[11] Telegraph Shortwave Radiocommunication Championship of the RSFSR (0500 - 1400 MSK) [0100 - 1000 GMT].

24 June - On-Site/Off-Site[11] Telegraph Shortwave Radiocommunication Championship of the RSFSR (0500 - 1400 MSK).

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[10]Yelena (Helen) Stempkovksaya, a radiowoman in the Soviet armed forces, was captured near Stalingrad (Volgograd), refused to divulge information, and died or was killed under interrogation. She was posthumously made a Hero of the Soviet Union. A women's amateur radio contest named after her is held each December.

[11]An "on-site/off-site" championship [ocho-zaochnyy chempionat] involves contestants who are "on site," i.e. who are physically present at the location of the championship, as well as contestants who operate over the air from "off site" locations.

The on-site participants of the RSFSR on-site/off-site championship will operate from Kaliningrad[12], using the same rules as for the USSR championship. Reports go to 142703, Moskovskaya obl., Vidnoye, ab./yashch. 23. [P. O. Box 23, 142703 VIDNOYE (Moskovskaya Oblast')].

CLUB NEWS

RN7N will operate from 4 through June 1990 to honor the 70th anniversary of the formation of the Karelian[13] labor commune [Karel'skaya trudovaya kommuna]. QSL cards for RN7N and for EV1AN, which operated from 1 - 9 and 12 - 13 May 1990, may be sent to UA1NEJ at 185026, Petrozavodsk, ab./yashch. 520 [P. O. Box 520, 185026 PETROZAVODSK]. Also, from 4 though 8 June 1990, activity days will be sponsored by the radio amateurs of Karelia[13], and the most active participants will be awarded memorial prizes. Reports go to 185034, Petrozavodsk, ab./yashch. 225, klub "Kivach" ["Kivach" Club, P. O. Box 225, 185034 PETROZAVODSK]. From UA1NDR. [See also next item.]

DIPLOMAS

EV1AN, RN7N, EK1NWB, and US1N are worth 35 points each toward the "NEUVOSTO KARJALA"[13] diploma. Log extracts go to the "Kivach" Club (see above).

DISTANT STATIONS

The collective of Bulgarian station LZ1KVZ invites everyone to help it meet its goal of having 100,000 QSOs this year. Operating frequencies are 3555, 7003, 10103, 14055, 21055 and 28055 kHz (CW), and 1845, 7053, 14180, 21280 and 28490 kHz (SSB). On 160m and 80m, the operating frequencies lie outside the bands allocated for "U" [amateur] stations.

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[12]Formerly Königsberg, East Prussia, now the administrative center of Kaliningradskaya Oblast' -- Oblast' No. 125, RSFSR identifier 2F -- which is a separate piece of RSFSR territory. To reach the rest of the RSFSR from "2F" by land, one has to pass through Lithuania and then through either Latvia or the Byelorussian SSR.

[13]On 31 March 1940, following the "Winter War" between Finland and the USSR, territory acquired by the latter was merged with that of the Karel'skaya ASSR and "raised" one level to form a separate union republic, the Karelo-Finskaya SSR. The process was reversed on 16 June 1956, when the Karelo-Finskaya SSR was "lowered" one level to become the Karel'skaya ASSR within the RSFSR, reducing the number of union republics from 16 to the present 15. Petrozavodsk is the administrative center. Callsigns with N as the second letter are still seen occasionally and may to date back to the period up to 1956. The name of the diploma appears in Latin letters in the article, means nothing in Russian, and is not translated; it means, in Finnish, "Soviet Karelia."

NLD-1440, 28 May - 3 June 1990:

DISTANT STATIONS

[Fourth of 5 items:] ZS9A (Walvis Bay) and 9L1UJ (ex-J52US, QSL via WB8JOC) often shows up around 1832 kHz at 0300 - 0330 UT.

CLUB NEWS

QSL cards for EK3AMK, which operated from Mamayev kurgan [? - spelling and location uncertain] on 9 May, are to be sent to 141200, Moskovskaya obl., Pushkino, ab./yashch. 1 [P. O. Box 1, 141200 PUSHKINO (Moskovskaya Oblast')]. From UV3HD.

Any shortwaver or SWL taking part in not less than two expeditions or fulfilling the requirements for three AREL diplomas [certificates] may become a member of the amateur radio expedition league (AREL) [AREL is in Latin letters in the article], which publishes its own newsletter [vestnik] and prepares standard-form [tipovyye] QSL cards for members. Additional information on AREL may be obtained by writing 241000, Bryansk, ab./yashch. 331 [P. O. Box 331, 241000 BRYANSK]. An AREL "round table" is held Sundays on 14290 kHz (plus or minus QRM) beginning at 1200 MSK [0800/0900 GMT]. From UA3YBY.

QSL cards for UA6YJA/UA8T and UA6YAV/UA8T (19 - 30 March 1990) may be sent to 352700, Maykop, ab./yashch. 40 [P. O. Box 40, 352700 MAYKOP]. From UA6YJA.

Sovetskiy Patriot, 04 - 10 June 1990, p 3, independent article:

"IN SPITE OF THE LAW," by A. Akishin and M. Gorbachev

The Government of the Turkmen SSR is demanding that the DOSAAF House of Military-Technical Instruction, which is nearing completion in Ashkhabad [the Republic capital], be turned over to the Republic to house health organizations, even though the basic structural changes needed would cost about a million rubles.

Besides the aeroclub, the building is to house the children's-youths' sport-technical school for radiosport, in which 420 to 440 kids will participate in 5 sections. This will help bring radiosport back in the Republic; over the last 15 years it has gone into a complete decline due to the fact that the local radio club doesn't have any premises of its own.

NLD-1441, 04 - 10 June 1990:

DIPLOMAS

To receive the "CALIFORNIA AWARD," it is necessary to have QSLs confirming contacts with 220 stations in California; at least 20 must be from operators who belong to the NORTHERN CALIFORNIA DX CLUB. Apply to CALIFORNIA AWARD MANAGER, NCDXC, P. O. BOX 608, MENLO PARK, CA. 94025, USA. Endorsements for one mode or one band are available. From K6ZM.

[NLD-1442, (11 - 17) June 1990: Missing.]

NLD-1443, 18 - 24 June 1990:

COMPETITIONS

From 2100 UT 20 July until 0700 UT 2100 July, within the framework of the Goodwill Games [Igry dobroy voli], the on-site/off-site shortwave radiocommunication championship of the world will take place on the bands 3.5 to 28 MHz (except the WARC bands). Modes of operation are CW and SSB. On-site participants (over 20 teams of 2 sportsmen each are expected) will go on the air from Seattle (USA). They will use callsigns with the special distinguishing mark /WG. Participants in the championship should be worked in the following windows: 3,525 - 3,550, 7,025 - 7,050, 14,025 - 14,050, 21,025 - 21,050, 28,025 - 28,050 kHz - CW; 3,775 - 3,925, 7,150 - 7,250, 14,200 - 14,300, 21,300 - 21,400, 28,400 - 28,500 kHz - SSB. These windows will be used by on-site participants. Since European stations may not operate above 3.8 and 7.1 MHz, on-site participants will use the split-frequency method. Reporting categories (only multiband) are: Single-op, multi-op/single-transmitter, and multi-op/multi-transmitter stations. All definitions of categories correspond to those for the CQ WW CONTEST. One contact may be made with a given station on each band on CW and one on SSB. The control numbers are RST (RS) and a sequential number beginning with 001. Contacts with on-site participants count 50 points and with on-site [sic - off-site assumed meant] participants on other continents 3 points, within the same continent 2 points, and within the same country 1 point. Points for CW contacts are doubled. Amateur call areas of the USA, Canada, and Japan, and DXCC countries, and stations of on-site participants are worth one point for the multiplier for each band and mode of operation. Those who make five contacts with on-site participants will receive a diploma [certificate], those who make thirty contacts a memorial pin, and those who take one of the first 500 places will receive, free a T-shirt [T-rubashka] with the symbol of the championship. Reports must be sent off not later than 20 August to WORLD RADIOSPORT TEAM CHAMPIONSHIP, 4.821 - 51ST SW, SEATLE, WA USA 98.116. Those who aspire to the first 500 places should include in their summary sheet the required T-shirt size: S (small), M (medium, L (large), XL (very large).

In the first all-Union QRP shortwave competition, the best results were turned in by UV3CX, UA4FER, RW9WA, and UA9WA. They have been included in the national mixed team, which will take part in the corresponding international competitions that will take place in September in Bulgaria. From the RLT Committee [Komitet po RLT; expansion of RLT unknown] of the FRS USSR.

CLUB NEWS

From 4 through 11 July a meeting of radio amateurs from sister-cities of Pskov -- Neuss (FRG), Nijmegen (Holland), and Kuopio (Finland) will take place. Special stations R1VW and R1WW will operate, and foreign radio amateurs will use their personal callsigns followed by a fraction bar and UA1W. QSL cards are to be sent to RA1WZ at 180007, Pskov-7, ab./yashch. 933 [P. O. Box 933, 180007 PSKOV-7]. From RA1WZ.

QSL cards for the expedition to Oleniy Island (Kara Sea), IOTA AS-05, 5 points for "RAEM"), which took place from 25 through 10 June [1990], are to be sent to 626711, Tyumenskaya obl., Nadym, ab./yashch. 158 [P. O. Box 158, 626711 NADYM (Tyumenskaya Oblast')]. From UA9KM.

Sovetskiy Patriot, 18 - 24 June 1990, p 15, independent article:

"THEY CONFIRMED THE CLASS," by N. Moskalev.

Over 60 sportsmen from Bulgaria, the Democratic People's Republic of Korea, Romania, Japan, and the Soviet Union took part in international sport radiodirectionfinding competitions, held recently in Krasnodar.

In these competitons, which have become one of the steps in preparing for the world championship in Vysoké Tatry (Czecho-Slovakia), the Soviet masters of radiodirectionfinding again confirmed their reputation. Only in the 144 MHz competitons did they yield first place to a representative from the DPRK.

In was the same picture in the personal scores:
Men - Ch. Guliyev (Moskovskaya Oblast') and K. Ren Zin (DPRK).
Women - S. Koshkina (Moskovskaya Oblast') and L. Bychak (Khar'kov).
Youth - Ye.Panchenko (Stavropol'), K.Zolochevskiy (Donetskaya Obl).
Veterans - V. Kirpichenko (Stavropol') and V. Korshunov (Kiev).

NLD-1444, 25 June - 01 July 1990:

CLUB NEWS

The expedition of the Novosibirsk Electrotechnical Institute and the magazine "Around the World" ["Vokrug sveta"] plan to operate until 2 August under the callsign EKØAC from Iona Island [spelling uncertain and location unknown, although there is a Iona Island west of the Scottish mainland] (IOTA AS-69), and from 3 through 15 August [1990] from the Shantar Islands, on 7010, 14025, and 21025 kHz CW, and 7080, 14160, and 21245 kHz SSB. Traffic for IOTA begins at 1300 UT on 14260 kHz, and for operational traffic for the expedition (it will take place on a seagoing yacht [? - na morskoy yakhte] on 3610 kHz at 1000 UT. QSLs cards are to be directed to 630092, Novosibirsk-92, ab./yashch. 1 [P. O. Box 1, 630092 NOVOSIBIRSK-92]. From UA9OBA.

Beginning 29 June and through 8 July [1990], an expedition will operate under the callsign 4K3MI from Morzhovets Island (a new island for IOTA, FB for the "RAEM" diploma/certificate). Shortwavers should send QSL cards to UY5XE at 290000, L'vov, ab./yashch. 19 [P. O. Box 19, 290000 L'VOV], and SWL's should send them to RC2SA at 212030, Mogilev, ab./yashch. 13 [P. O. Box 13, 212030 MOGILEV].

[end of SOVETSKIY PATRIOT annex]